2007-08 Idaho 4th Grade Direct Mathematics Assessment

441

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STUDENTS DO NOT WRITE IN

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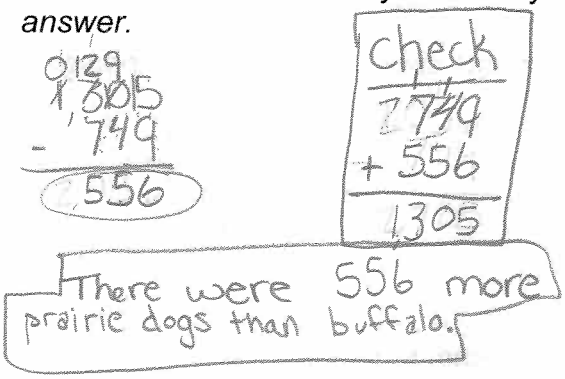
e entire test to you before you begin.
lculator on this assessment.

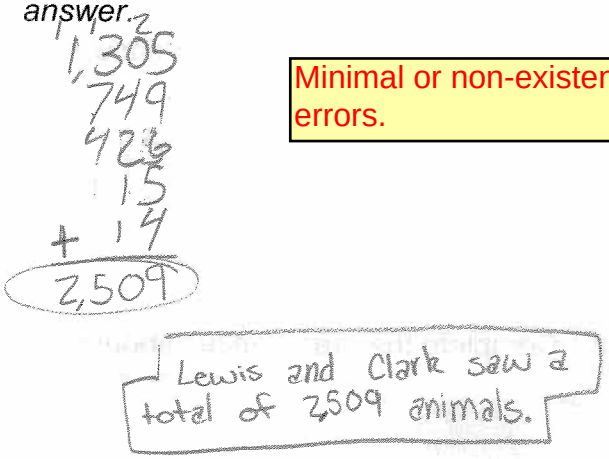
Advanced understanding of situation.

1. In the spring, Lewis and Clark saw 749 buffalo, 15 mountain sheep, 1,305 prairie dogs, 14 grizzly bears, and 426 deer.

(−) a. How many more prairie dogs were there than buffalo? *Show how you found your answer.*

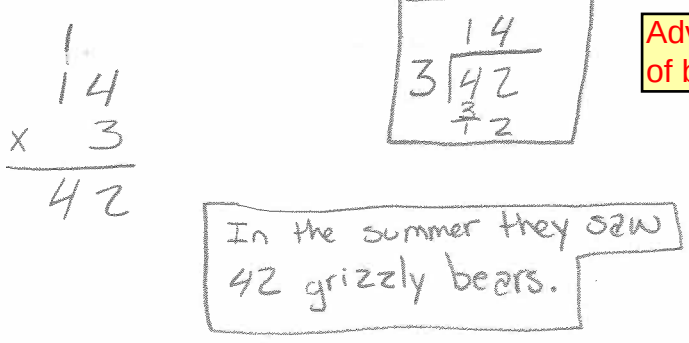


(+) b. How many animals did Lewis and Clark see in all? *Show how you found your answer.*



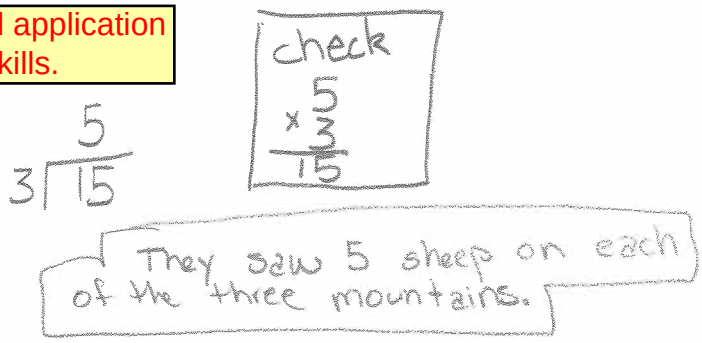
Minimal or non-existent errors.

(×) c. In the summer, Lewis and Clark saw three times more grizzly bears than in the spring. How many bears did they see? *Show how you found your answer.*



(÷) d. Lewis and Clark saw a total of 15 sheep on three different mountains. Each mountain had the same amount of sheep. How many sheep did Lewis and Clark see on each mountain? *Show how you found your answer.*

Advanced application of basic skills.



Read problems 2, 3, 4, and 5 on this and the next two pages.
Select three problems to answer. Answer ALL of the parts of the three problems you select to answer.
Cross out the one problem that you do not choose to answer.

2. The 4th grade students at Hillcrest School chose their favorite ice cream topping. The results are below.

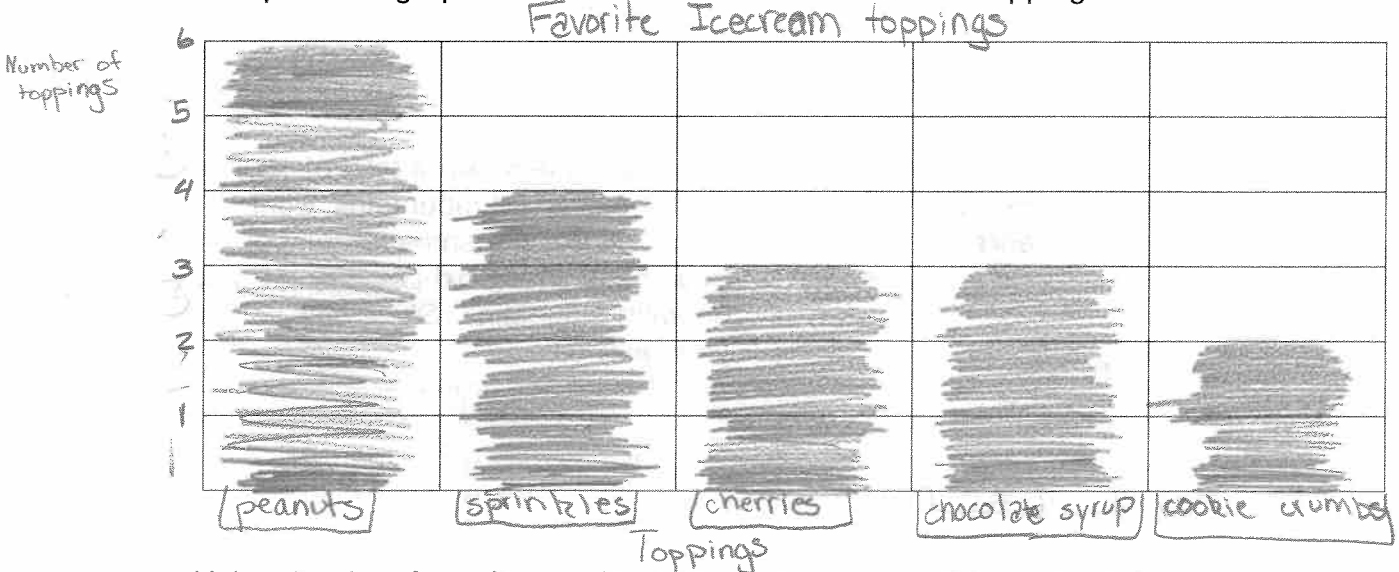
Student	Favorite Topping	Student	Favorite Topping
Tommy.....	peanuts	Debbie.....	3chocolate syrup
Julie.....	1 sprinkles	Trevor.....	peanuts
Nick.....	1 cherries	Zack.....	cookie crumbs
David.....	peanuts	Johnny.....	peanuts
Joseph.....	peanuts	Diane.....	3cherries
Kim.....	2 sprinkles	Becky.....	3sprinkles
Nancy.....	1 chocolate syrup	Tim.....	peanuts
Tiffany.....	2chocolate syrup	Cathy.....	4sprinkles
Jimmy.....	2cherries	Chris.....	cookie crumbs

a. Organize the information to show how many students chose each kind of topping. *Show how you found your answer.*

peanuts = 6
sprinkles = 4
cherries = 3
chocolate syrup = 3
cookie crumbs = 2

Appropriate processes accurately completed.

b. Complete the graph below about the favorite ice cream toppings.



c. Using the data from the graph, write two math statements that are true.

1. A lot of students like peanuts has Icecream topping.
2. Cherries and chocolate syrup are tied.

3. Jim collects toy cars. He sorts them into boxes. He put one in the first box, four in the second box, and seven in the third box.

   a. Complete the chart below showing the number of cars Jim will put in each box.

	Box 1	Box 2	Box 3	Box 4	Box 5
Number of Cars	1	4	7	10	13

Communicates effectively.

   b. Continuing this pattern, how many will Jim put in the seventh box? *Show how you found your answer.* He will put 19 in the 7th box.

Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7
1	4	7	10	13	16	19

   c. How many total cars will there be in all seven boxes? *Show how you found your answer.*

19
16
13
10
7
4
1
70 in all seven boxes

There will be 70 in all 7 boxes.

   d. Explain the rule for this pattern. *Show how you found your answer.* x3 x3

You add 3 to each number each time. Example: 3 6 9

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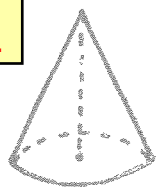
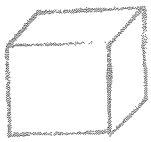
4. a. Write the name of each shape.

Advanced communication.

Multiple problem-solving strategies.

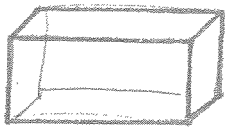


cone



cube

triangle



rectangular prism

   b. Which two shapes are more alike? *Explain your thinking.*

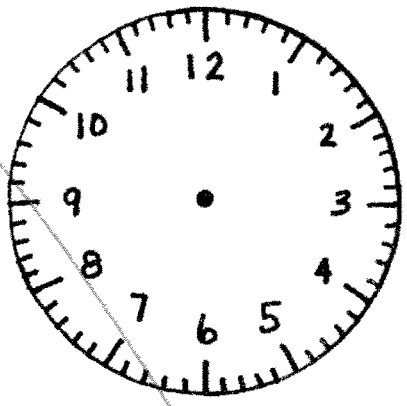
The cube and rectangular prism are most alike because they both have 6 faces, 8 corners, and 12 edges.

Advanced vocabulary.

   c. Choose a shape above. *Describe its attributes.*

The rectangular prism has 6 faces, 12 edges, and 8 corners.

5. Maria spent each Monday night after school doing the following activities: 20 minutes doing math, 30 minutes practicing gymnastics, 15 minutes studying spelling words, 5 minutes practicing math facts, and 1 hour of free play.



a. What is the total time she spends on these activities? *Show how you found your answer.*

b. If she started these activities at 4:15 P.M., what time would she finish? *Show how you found your answer.*

c. On one Monday night, Maria started her activities at 4:15 P.M. Her mother told her to be finished by 6:00 P.M. Which activities could she choose so that she finished by 6:00 P.M.? *Show how you found your answer.*